

WHAT IS CLAIMED IS:

1. A human Nap1 protein having the amino acid sequence represented by SEQ ID NO. 2 or a protein having an amino acid sequence which includes substitution, deletion or addition of one or more amino acids of the amino acid sequence represented by SEQ ID NO. 2 and having apoptosis-suppressing activities.

Sub B1 > 2. A DNA encoding the protein according to Claim 1.

3. A DNA having the nucleotide sequence represented by SEQ ID NO. 1.

Sub B2 > 4. A DNA capable of hybridizing to the nucleotide sequence of the DNA according to Claim 2 or 3 under stringent conditions and encoding a protein having apoptosis-suppressing activities.

5. A recombinant vector containing the DNA according to any one of Claims 2 to 4 and a vector.

6. A transformant which is obtained by introducing the vector according to Claim 5 into a host cell.

In A > ~~7. A process for producing the said protein, which comprises culturing the transformant according to Claim 6 in a medium to produce and accumulate the protein according to Claim 1 in the culture and harvesting the protein from the culture to be obtained.~~

8. A therapeutic composition for Alzheimer's disease containing the protein according to Claim 1 as an active ingredient.

9. An oligonucleotide having a continuous 5 to 60-bp nucleotide sequence out of the DNA nucleotide sequences according to any one of Claims 2 to 4 or an oligonucleotide having a sequence complementary to said oligonucleotide.

10. An oligonucleotide according to Claim 9, which has a nucleotide sequence represented by SEQ ID NO. 17 or 18.

11. An oligonucleotide according to Claim 9, which has a nucleotide sequence represented by SEQ ID NO. 26 or 28.

12. A method for detecting an mRNA of a human Nap1 gene using the


oligonucleotide according to Claim 9 ~~or 10~~.

13. A diagnostic reagent for Alzheimer's disease containing the oligonucleotide according to Claim 9 ~~or 10~~.

14. A method for repressing transcription of the human Nap1 gene or translation of mRNA thereof using the oligonucleotide according to Claim 9 ~~or 11~~.

15. A therapeutic compositoin for apoptosis-participating diseases containing the oligonucleotide according to Claim 9 ~~or 11~~.

16. An antibody recognizing the protein according to Claim 1.

 ~~17. An immunoassay of the protein according to Claim 1 using the antibody according to Claim 16.~~

18. A diagnostic reagent for Alzheimer's disease containing the antibody according to Claim 16.

19. A therapeutic composition for apoptosis-participating diseases containing the antibody according to Claim 16 as an active ingredient.

